ADVANCE PRODUCT ANNOUNCEMENTS

RAPID PROCESSING EQUIPMENTS

[redacted]

ADVANCE PRODUCT ANNOUNCEMENT

SPAN GROUND PROCESSOR
Model 200

The SPAN Ground Processor, Model 200, has been developed to fulfill the need for a compact portable field photographic film processor operating independent of any supply of water and requiring only external electrical power for operation. The STATINTL processor is designed to take up, process, separate and rewind 35mm and 70mm film in lengths up to 250 feet, utilizing [redacted] STATINTL [redacted] Bimat film as the processing medium. The processor will accept pre-imbibed Bimat available from the [redacted] STATINTL or Bimat prepared in the [redacted] line of Bimat Preparation Tanks.

In operation, Bimat from the Bimat supply spindle is laminated to the process spool with the pressure roller retracted and latched out of position. Exposed film from the film supply spindle is then laminated to the Bimat, emulsion-to-emulsion, and the pressure roller released and placed in its operating position. Constant force springs are utilized on the pressure roller to maintain uniform pressure throughout the laminating process. The processor requires dark room loading but may be operated in white light after the light tight cover is installed.

After threading, the processing function is initiated by means of the single control switch placed in the "Process" mode. Windup time is approximately three minutes for 100 feet of film after which a waiting period is required to bring the process to completion. The length of the waiting period is dependent on the type of film being processed; fifteen minutes for aerial

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[redacted]

reconnaissance type films, and lesser times for recording type films. Following the completion of processing, operation is continued in white light, with the processed film and Bimat threaded on the rewind spindles, the control switch placed in the rewind mode and the film and Bimat separated and rewound on their respective spools. Provision is also included for laminating a transparent cover sheet material to the positive Bimat image, eliminating the need for post processing washing and facilitating immediate handling without drying.

SPECIFICATIONS

SPAN GROUND PROCESSOR

Film Size	35mm or 70mm
Film Capacity	Variable to a maximum of 250 feet
Film Type	
Negative Film	[redacted] Special Plus-X STATINTL Aerial film (estar base), Type SO-135, [redacted] Special Pana- STATINTL tomic-X Aerographic film (estar base), Type SO-136 and [redacted] Dacomatic STATINTL family of films
Processing Medium (Positive)	[redacted] Bimat Film STATINTL (estar base), Type SO-111
Takeup and Rewind Rate	Approximately 30 feet/minute
Processing Time	Variable dependent upon film type, 15 minute maximum
Physical Dimensions	Approximately 12 x 16 x 16 inches
Weight	Approximately 40 lbs.
Power Requirement	115 VAC, 60 cycle, 100 watts

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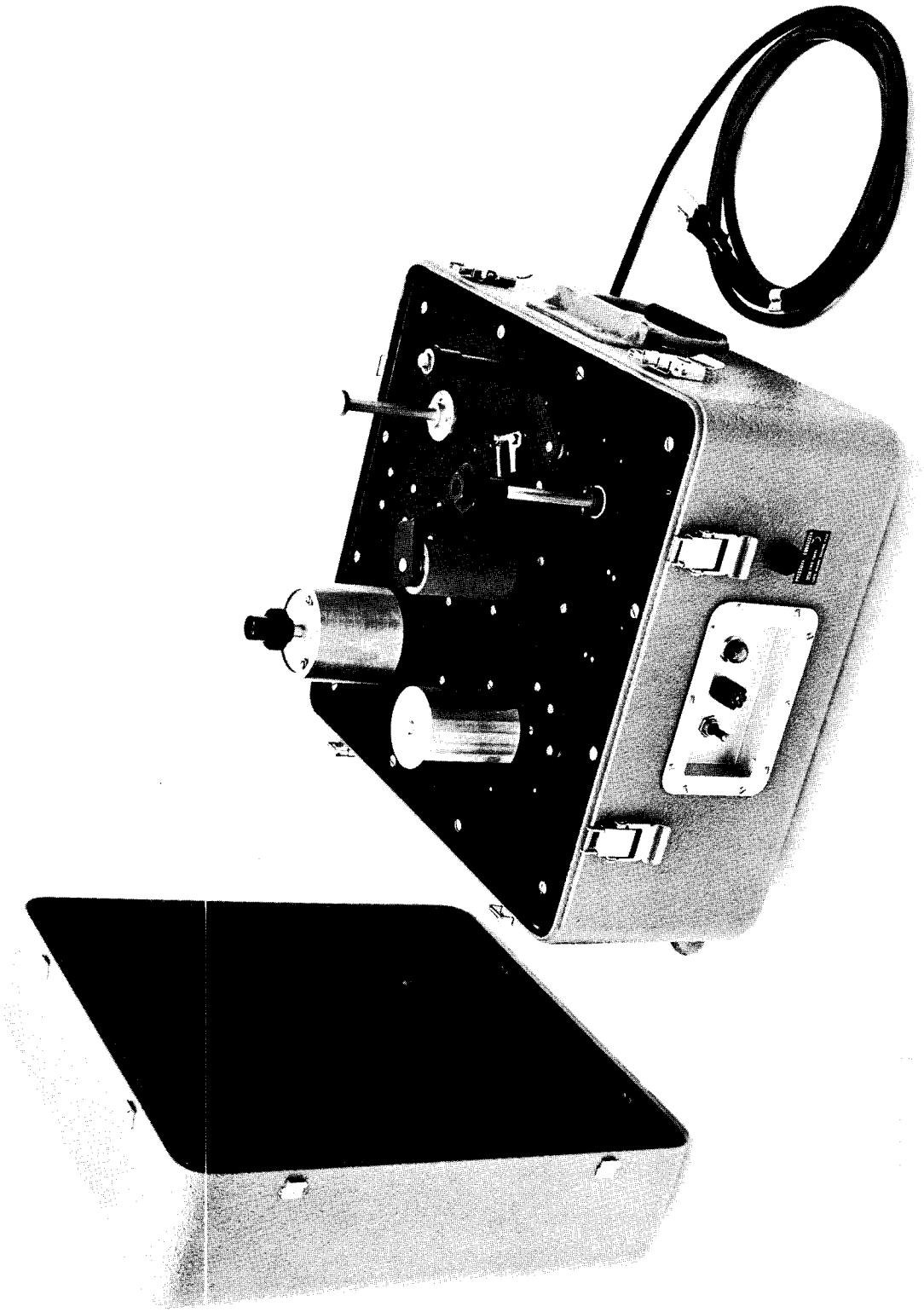
[redacted]



MODEL 200

PORTABLE PROCESSOR

[redacted]

ADVANCE PRODUCT ANNOUNCEMENT

BIMAT PREPARATION TANK
Model BP5-250

STATINTL The Model BP5-250 Bimat Preparation Tank is designed to prepare [redacted] Bimat material for use in photographic systems wherein the Bimat is both the processing medium for negative film and, simultaneously, the vehicle for the formation of a corresponding positive print or transparency. The primary functions of the Bimat Preparation Tank are to automatically regulate the amount of chemical imbibant absorbed by the Bimat emulsion through close control of the temperature of the imbibant solution, the material transport rate per pass through the solution and the total number of passes.

The Bimat Preparation Tank consists of an approximately 16x14x16 inch unitized structure which encases the soaking tank, the solid state thermoelectric heater/coolers, the control electronics, and the spool drive assembly. All controls are conveniently recess-mounted on one of the side castings. No special installation is required except plugging the electrical cord into any standard 115 VAC 60 cycle power source and allowing approximately twenty minutes for a full tank of Bimat imbibant solution to come up to temperature.

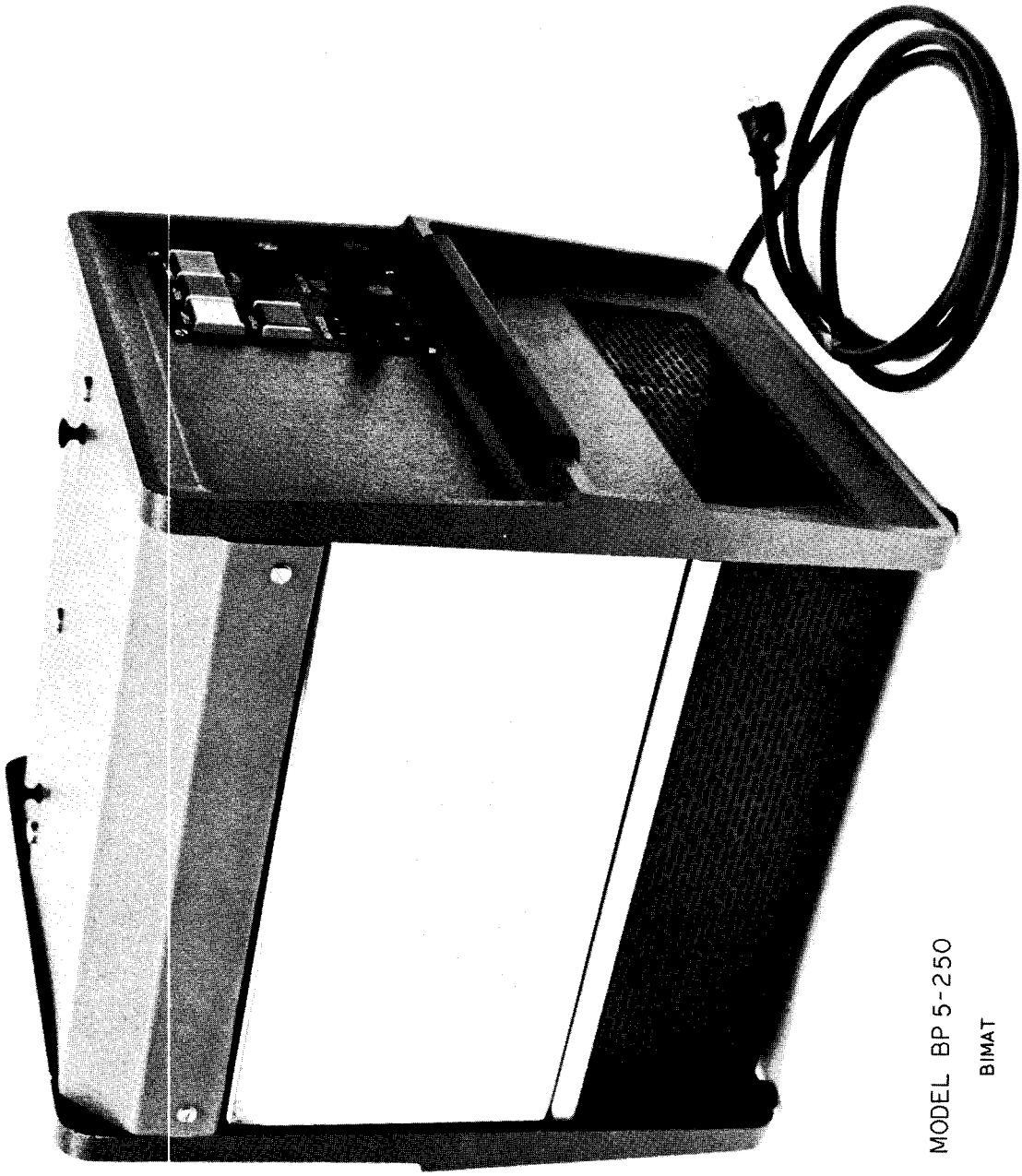
STATINTL

[redacted]

SPECIFICATIONS

BIMAT PREPARATION TANK

Bimat Film Capacity	125 feet
Tank Imbibant Solution Capacity	3.5 quarts
Solution Temperature Range	80° to 120°F (adjustable)
Temperature Stability	$\pm 2^{\circ}$F of preset temperature
Number of Passes	1 to 11 (adjustable)
Bimat Transport Rate/Pass	~HI - 25 ft/min. ~LOW - 18 ft/min.
Power Input	105 to 125 VAC, 50-60 CPA, 300 watts maximum
Dimensions	16¼" wide, 13-3/4" deep, 15½" high
Net Weight	70 pounds
Shipping Weight	100 pounds



MODEL BP 5-250

BIMAT

PREPARATION TANK

STATINTL

[redacted]

[redacted]

ADVANCE PRODUCT ANNOUNCEMENT

SPAN PROCESSOR-DRYER-VIEWER

Model GP 5-100

The Model GP 5-100 SPAN Processor-Dryer-Viewer is a laboratory Bimat processor designed for use with 70mm or 5" film in lengths up to 100 feet. It also functions as a separator-dryer-viewer for film which has been processed on other equipment, such as airborne processing camera/magazine systems.

The GP 5-100 is a self-contained unit approximately 22" wide, 33" long and 29" high. Two independent film drive systems are for processing and drying-viewing. All controls are located on the front panel. Access to the interior of the processing and drying sections is obtained by means of removable side panels and hinged covers. Two viewing stations are provided, one for the positive and one for the negative, so that both sets of imagery may be viewed simultaneously at the completion of the drying process.

Drying rates between 1.0 and 7.5 feet per minute are available, depending on the ambient relative humidity.

Darkroom loading of the processing section is required. After loading, all subsequent procedures may be performed in white light.

Optional features which can be incorporated in the processor are elimination of the drying function so that the film and Bimat may be only separated and rewound for subsequent washing and drying.

[redacted]

SPECIFICATIONS

Model GP 5-100 Processor-Dryer-Viewer

Film Size	5" or 70mm
Film Capacity	Variable to a maximum of 100 feet
Film Type	
Negative Film	[redacted] Special Plus-X Aerial film (estar base), Type SO-135, [redacted] Special Panatomic-X Aerographic film (estar base), Type SO-136 and [redacted] Dacomatic family of films
Processing Medium (Positive)	[redacted] Bimat Film (estar base), Type SO-111
Processing Rate	Approximately 20 feet/minute
Drying Transport Rate	1.0 to 7.5 feet/minute
Processing Time	Variable dependent upon film type, 15 minute maximum
Physical Dimensions	Approximately 22 x 33 x 29 inches
Weight	150 lbs.
Power Requirement	220 VAC, 60 cycle, 1Ø, 14 amps, or 110 VAC, 60 cycle, 1Ø, 30 amps

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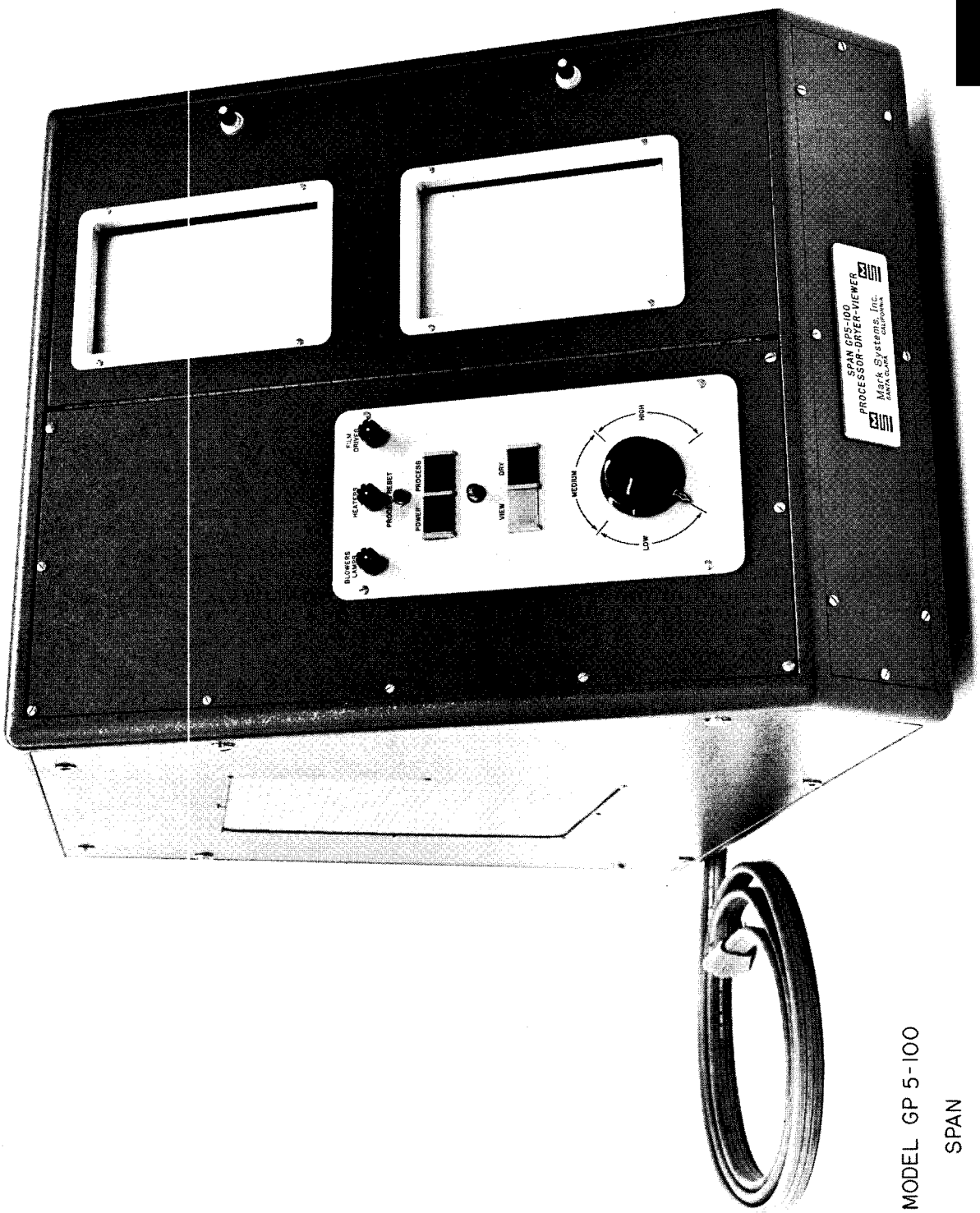

MODEL GP 5-100

SPAN

PROCESSOR-DRYER-VIEWER

[redacted]

ADVANCE PRODUCT ANNOUNCEMENT

RAPID ACCESS FILM PROCESSOR
Model RAPC 5-250

Developed as an adjunct to CRT recorders utilizing five inch film, the RAPC 5-250 Rapid Access Film Processor is designed to accept [redacted] film or its equivalent on white opaque photographic paper (hard copy), process the film, present the film for viewing while simultaneously drying it, store the film in a slack box, and recall the film from the slack box upon command. A review platform is provided for examining the film as it is recalled from the slack box.

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Utilizing the applicator principle, the unit will process up to 250 feet of film without chemical replenishment. Processing time is five seconds, with seven seconds until first viewing, and a total of 25 seconds to dry film output. The unit is completely self-contained and includes automatic temperature control of chemicals.

While specifically packaged for airborne console installations, the unit is adaptable to other configurations for specialized ground or vehicle-borne installations.

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SPECIFICATIONS

RAPC 5-250 RAPID ACCESS FILM PROCESSOR

Processing Capability	at least 250 feet of 5" [redacted] film or paper, STATINTL without chemical replenishment
Processing Rate	Variable over a 5:1 ratio with a maximum of 2" per second. Other processing rate ranges available.
Slack Loop Storage Capability	20 feet or 2 minutes operating time
Slack Loop Recall Rates	0 to 8 inches per second
Dump Box Capacity	up to 50 feet of 5" film Takeup spool can be substituted for dump box.
Chemical Requirements	a) 1 qt. developing solution b) 1 qt. clearing solution c) 1 qt. rinse solution
Physical Characteristics	30" high x 10" wide x 24" deep (Less dump box and review platform) Weight - approx. 90 lbs.
Power Input	Standby - 115v, 400 cycle, single phase, 1.5 amp, 28vdc, 1 amp Operate - 115v, 400 cycle, single phase, 10 amp, 28vdc, 2 amp

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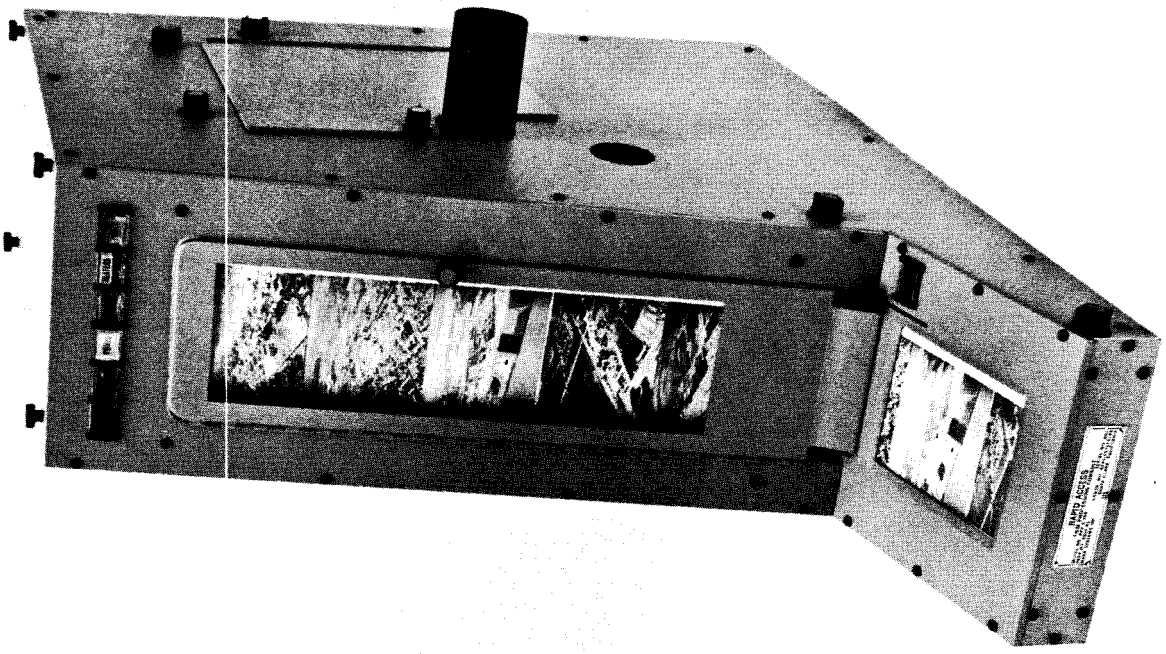
[redacted]



MODEL RAPC5-250

RAPID ACCESS

FILM PROCESSOR

Approved For Release 2001/08/13 : CIA-RDP78B04747A002100060002-1

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ADVANCE PRODUCT ANNOUNCEMENT

SPAN INFLIGHT PROCESSING MAGAZINE
Model MS-730A

The SPAN Inflight Processing Magazine, Model MS-730A, is designed to replace the standard takeup cassette on the KA30A aerial camera providing the simultaneous and unattended inflight production of both a completely processed negative and a completely processed positive of the negative -- both available for immediate viewing or reproduction within five to fifteen minutes after exposure. Use of the magazine requires no modification to the camera or aircraft camera control system, thus permitting instant interchangeability between the processing magazine and a conventional non-processing takeup cassette. Inflight operation is automatic in that all magazine functions are interlocked and under the direct control of the aircraft camera control system.

The basic functions of the magazine are to accept exposed film from the camera, monitor and control the takeup of this film by a film dancer loop, draw prepared Bimat film from a supply spool and mate the negative film and Bimat film on a takeup core under a rubber pressure roller while they are being spooled together in a continuous takeup. The magazine is capable of transport rates covering the full V/h range of the KA30A camera.

Since operation of the magazine may involve ambient flight environments and satisfactory processing occurs only within a

[redacted]

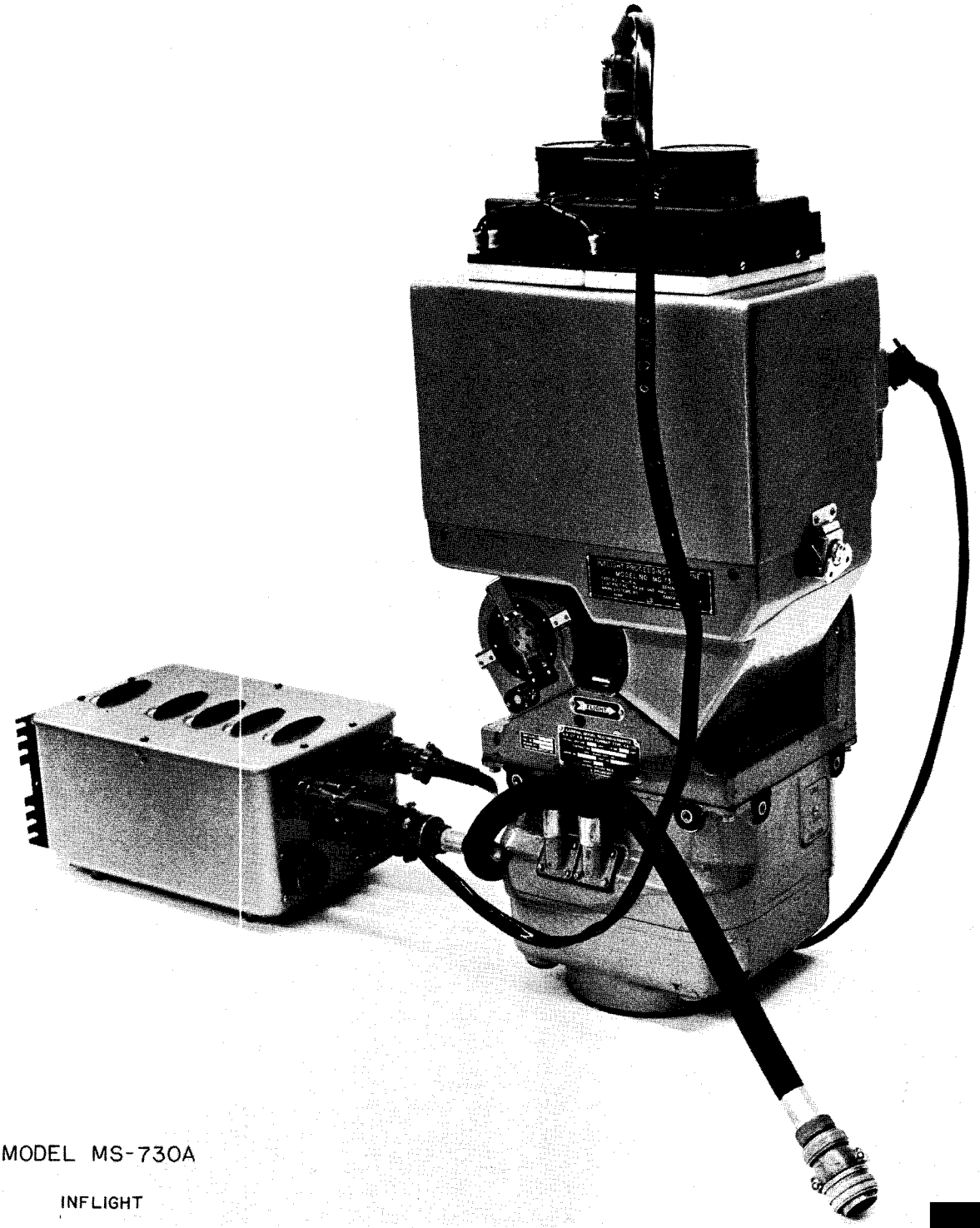
processing temperature range of 65°F to 85°F, internal magazine temperature control is provided. Attendant with the magazine is a magazine control unit containing the control electronics and power supply for the temperature control.

Loading and threading of the magazine is a daylight operation requiring no darkroom or special facilities. Both the Bimat supply spool and processing takeup core are removable to facilitate loading and unloading, keeping aircraft turn-around time at a minimum.

SPECIFICATIONS

SPAN INFLIGHT PROCESSING MAGAZINE

Film Size	5 inch
Film Capacity	variable to a maximum of 100 feet
Film Type	
Negative Film	[redacted] STATINTL Special Plus-X Aerial Film (estar base), Type SO-135, [redacted] STATINTL Special Panatomic-X Aerographic film (estar base), Type SO-136
Processing Medium (positive)	[redacted] STATINTL Bimat Film (estar base), type SO-111 STATINTL
Film Transport Rate	Compatible with the [redacted] maximum of 30 in./sec.
Processing Time	Variable dependent upon film type, 15 minute maximum
Physical Dimensions	
Inflight Processing Magazine	Approx. 9"x 12"x 19"
Magazine Control Unit	Approx. 7"x 8"x 12"
Power Requirement	115 VAC, 400 cycle, 1 amp - 28 VDC, 15 amp



MODEL MS-730A

INFLIGHT

PROCESSING MAGAZINE

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STATINTL [redacted]

ADVANCE PRODUCT ANNOUNCEMENT

SPAN INFLIGHT PROCESSING MAGAZINE
Model MS-756E

The SPAN MS-756E Inflight Processing Magazine represents a new and advanced inflight processing system designed for use STATINTL with the [redacted] capable of providing simultaneous inflight film processing and positive reproduction of up to 125 feet of five inch aerial photographic film at varying camera film transport speeds ranging up to 66 inches per second. The system will accommodate 125 feet of exposed film together with 125 feet of [redacted] Bimat material STATINTL which upon completion of processing produces both a fully processed negative and a positive transparency (or a positive reflection print) which can be automatically separated within the magazine to provide a capability for ejecting the positive (or both positive and negative) from the aircraft for recovery by ground forces. The system has the added capability for providing continuous takeup and storage of an additional 125 feet of unprocessed exposed film from the [redacted] upon STATINTL completion of the processing takeup mode.

Additional features of the system include: a built-in temperature control system which provides processing temperature control in the presence of a $75^{\circ} \pm 30^{\circ}$F camera compartment ambient temperature variation, in the event of aircraft temperature conditioning equipment malfunction; an independent drive system STATINTL separate from the [redacted] camera; and the ability to command ejection at any time prior to completion of the normal takeup sequence of operation.

STATINTL The MS-756E Inflight Processing Magazine system consists of an ejectable cassette housing assembly, a partial ejectable cassette and related processing assembly, a removable takeup

[redacted]

cassette, a mechanical drive package, and the magazine control unit. The magazine configuration is adaptable for use in any aircraft which contains facilities to mount the [redacted] camera and related inflight processing components, or the [redacted] camera and aerial photographic film cassette ejector set LS-53A.

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SPECIFICATIONS

SPAN INFLIGHT PROCESSING MAGAZINE

Film Capacity	
Processing Mode	125' of processed negative 125' of processed positive (Bimat)
Non-Processing Mode	125' of negative
Film Type	
Negative	Perforated 5" Kodak SO-135 negative film
Positive	Unperforated 5" [redacted] SO-111 Bimat positive film on Estar base
Film Chemicals	
[redacted] Bimat Imbibant	MX-572 low contrast imbibant or MS-482 high contrast imbibant
Bimat Spool Size	5" x 125'
Operating Speed	11 - 66 in/sec.
Operation	Autocycle
Operating Modes	Processing mode, rewind mode, unprocessed film takeup mode
Operating Power	115 VAC, 400 cycle, 0.86 amperes (running), 1.4 amperes (starting surge) 28 VDC, 6 amperes (running), 35 amperes (starting surge) 28 VAC, 400 cycles, 0.2 amperes (running), 1.0 amperes (starting surge).
Physical Dimensions (inches)	
Inflight Processing Magazine	Depth 10, width 18, height 17
Magazine Control Unit	Depth 6, width 8, height 10

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Weight	
Loaded (250 feet of film, 125 feet of Bimat)	78 lbs. (approx.)
Unloaded	70 lbs. (approx.)
Camera Compartment Temperature	$75^{\circ}F \pm 30^{\circ}F$
Operating Altitude	up to 30,000 feet

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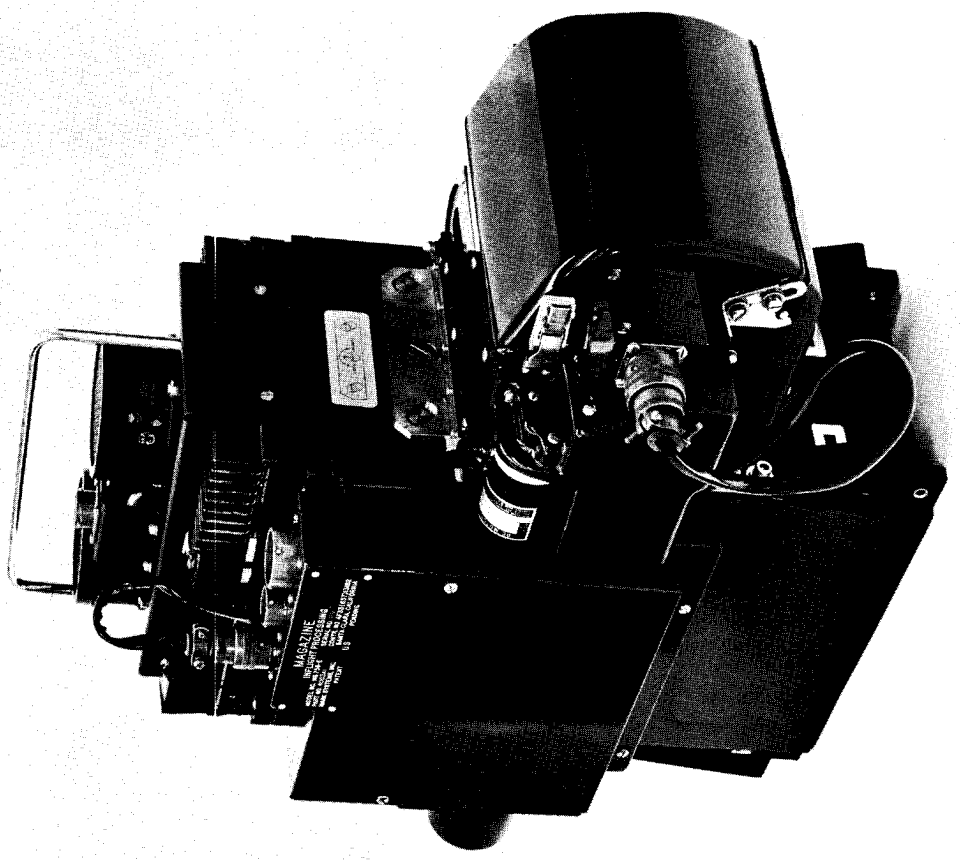
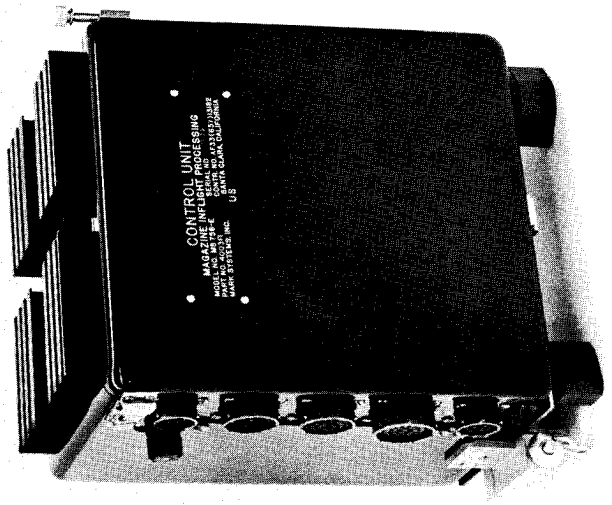
[redacted]





MODEL MS-756E
INFLIGHT
PROCESSING MAGAZINE

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